Psychometric properties of the Thai Internalised Stigma Scale (TIS-LCH) for care home residents

Abstract

Objectives: Living in a care home is a source of stigma in Thai culture, although there is currently no measurement tool in the Thai language specifically designed to assess internalised stigma in care home residents. The Thai Version of Internalised Stigma of Living in a Care Home (TIS-LCH) scale was developed and tested for its psychometric properties among Thai older residents.

Methods: The Thai version of Internalised Stigma of Mental Health Illness (ISMI) Scale was revised into the TIS-LCH by replacing the word of "*mental health illness*" to "*living in a care home*". Content validity of the TIS-LCH was determined through expert review (n=6), and reliability testing was undertaken with older care home residents (n=128).

Results: The TIS-LCH showed good internal consistency, with a Cronbach's alpha of 0.87. Test-retest reliability coefficient of TIS-LCH was excellent for the full scale (ICC=.90).

Conclusions: The Thai version of IS-LCH (TIS-LCH) is a valid and reliable measurement tool for assessing internalised stigma in Thai care home residents.

Clinical Implications: The IS-LCH will be a useful research tool to assess internalised stigma in older adults living in care settings. Understanding stigma will help health and social care professionals to plan interventions aimed at reducing or preventing negative emotional reactions and negative behavioural responses toward stigma, which are known to be associated with mental illness and particularly depression among this population.

Keywords: Care home, IS-LCH, Long-term care, Older adults, Psychometric properties, Stigma.

Introduction

Stigma is generally identified as negative characteristics attributed to or perceived by individuals or groups (Gaebel et al., 2017); *internalised stigma* (IS) occurs when stigmatised individuals ascribe negative attributes to themselves (Corrigan & Watson, 2002). Internalised stigma may negatively impact on care home residents' wellbeing, resulting in lowered self-esteem, social isolation, self-harm and depression. There is a need for further research around stigma in Thai care home settings, but there is currently no Thai measurement to assess IS among older adults. A measurement tool available in Thai language may encourage further research on stigma in this cultural setting. Furthermore, it would assist health and social care professionals in the clinical assessment of stigma in the care home population. Being able to assess stigma in older care home residents may help to target problem areas that may be alleviated by supportive or educational intervention. In this study, a Thai version of the Internalised Stigma of Living in a Care Home Scale (TIS-LCH) was developed and tested for psychometric properties.

Methods

In this paper, we describe the development of the TIS-LCH through the adaptation of the Internalised Stigma of Mental Health Illness (ISMI) Scale, and we report on the psychometric properties of the TIS-LCH in a sample of Thai older adults living in care homes. The validation procedures are presented in part one: developing the TIS-LCH Scale and in part two: testing the reliability of the TIS-LCH Scale.

Part 1: Developing the TIS-LCH Scale

The original instrument: Thai version of ISMI

TIS-LCH was originally adapted from the Thai version of Internalised Stigma of Mental Illness (ISMI) Scale (Wong-Anuchit et al., 2016) (hereinafter TISMI), which was used to assess IS

among psychiatric outpatients in Thailand. The original ISMI (29 items) was designed to measure the subjective experience of stigma. Specialised versions were developed for people with depression, schizophrenia, leprosy, smoking and caregivers of people with mental illness, showing validity and reliability across a wide range of languages, cultures and writing systems (Boyd et al., 2014). Therefore, TISMI was selected to guide the adaptation and development of psychometric properties in TIS-LCH.

The adaptation procedure

After obtaining copyright permission in July 2015 for adapting the TISMI to the TIS-LCH, the TISMI scale was revised into the TIS-LCH by replacing the words "*mental health illness*" in the statement with "*living in a care home: พักอาศัยอยู่ในสถานสงเคราะห์คนชรา*". The content validity process involved a panel of three professional experts and three lay experts, as recommended by Rubio et al. (2003). The lay experts were three volunteer residents living in a care home in North Eastern Thailand. They helped to clarify the phrasing and any unclear terms, using culturally appropriate terminology. The lay experts were consenting Thai citizens aged 60 and over, who were fluent in Thai language (speaking, reading and writing skills), with no severe cognitive impairment or psychological disturbance (as determined by care home staff). There were two males and one female aged between 66 and 83 years. Professional experts were selected according to their expertise in geriatric psychology, including significant relevant research publications and clinical experience. They all had higher degrees in the area of mental health, and were Thai nationals. The professional experts were requested to assess the revised scale using a Content Validity Index (CVI) by rating each scale item regarding its relevance to the underlying construct using four-point scale: *1=not relevant, 2= somewhat relevant, 3= quite relevant* and *4= high relevant* (Polit et al., 2007). The CVI is computed according to the number of experts giving a rating of either 3 or 4, divided by the number of

the total scale. It is recommended that the CVI should be 0.80 or higher (Polit et al., 2007). Grammatical errors, misspellings and other minor discrepancies were addressed and were corrected before reliability testing by the researcher.

Part 2: Testing the Reliability of the TIS-LCH Scale

The final revised scale was tested for internal consistency and test-retest reliability between seven and 14 days from the first administration, within a structured interview.

Setting and population

The reliability testing was conducted with 128 residents in two care homes in North Eastern Thailand over approximately four months, between July and November 2015. The inclusion criteria were: aged 60 and above, fluent in Thai language, with no severe cognitive impairment or psychological disturbance that may prevent comprehension of the participant information sheet and the questionnaire. Of the 128 residents, the first 15 were invited to conduct test- retest of the scale by completing the scale a second time after a time-delay.

Data collection

Ethical approval for the study was obtained from a University Institutional Review Board in the UK (Ref: OVSa16042015 SoHS) and a Hospital Institutional Review Board in Thailand (Ref: 053/2015). The data were collected as part of a research study for which procedures are described elsewhere (Tosangwarn et al., 2017). Figure 1 illustrates the process of developing the psychometric properties of the TIS-LCH.

(Insert figure 1 about here)

Data analysis

Descriptive statistics were used to summarise the demographic data from the study (percentage, mean, medium and standard deviation). Internal consistency reliability was determined by

Cronbach's alpha coefficient to determine whether constituent items measured the same domain (Rattray & Jones, 2007). Test-retest reliability was assessed by calculation of the Intraclass Correlation Coefficient (Pallant, 2016).

Results

Demographic characteristics of participants

Participants were aged between 61-96 years (mean 76.86, SD 7.78, n=128). 63% (n=80) were female and 37% (n=48) male. Nearly half of the participants (48.44%, n=62) were widowed. Almost all were Buddhists (98.44%, n=126). Nearly one-fifth of them (18.75%, n=24) had no formal education, and only 2.34% (n=3) of residents were educated to bachelor degree level or higher. All had been living in the care home for between one month and 36 years. Approximately one-third of residents had received no visitors at the care home since they became residents (33.59%, n=43). Seventy per cent (70.31%, n=90) reported being diagnosed with one or more diseases, notably hypertension (47.66%, n=61) and diabetes mellitus (17.97%, n=23). The majority of residents (87.50%, n=112) self-reported comorbidities (having one or more health problems), over half of them (52.34%, n=67) experienced difficulties with vision, and nearly half of them (43.75%, n=56) experienced difficulties with mobility.

Validity of the scale

The final version of TIS-LCH consisted of 26 items, with reported CVI=0.80; three items were omitted from the scale following lay and expert review because they were considered inappropriate or offensive for Thai older adults living in a care home and reported with I-CVI (Item-Level Content Validity Index) ≤0.80. These items included item 6: *Older adults who live in a care home shouldn't get married (Stereotype Endorsement) I-CVI=0.33*, item 20: *I stay away from social situations in order to protect my family or friends from embarrassment*

(Social Withdrawal) I-CVI=0.33 and item 25: *Nobody would be interested in getting close to me because I live in a care home (Perceived Discrimination) I-CVI=0.67.*

The revised scale includes five subscales: Alienation, Stereotype Endorsement, Perceived Discrimination, Social Withdrawal and Stigma Resistance. These are measured using Likert-type responses ranging from "strongly disagree" (1) to "strongly agree" (4). The score can be calculated by adding up the score from all of the items, after reverse-scoring five items in the Stigma Resistance subscale, and then dividing the sum by the number of total items. Higher scores indicate greater internalised stigma. IS scores can be divided into four categories: 1.00 to 2.00 (minimal to no internalised stigma), 2.01 to 2.50 (mild internalised stigma), 2.51 to 3.00 (moderate internalised stigma) and 3.01 to 4.00 (severe internalised stigma) (Lysaker, Roe, & Yanos, 2007).

Internal consistency reliability

The internal consistency of the entire TIS-LCH scale was high, with a Cronbach's alpha of 0.87. Acceptable levels of internal consistency were found in most subscales, with Cronbach's alpha values of 0.77, 0.59, 0.62, 0.69 and 0.69 for Alienation, Stereotype Endorsement, Discrimination Experience, Social Withdrawal and Stigma Resistance, respectively.

Test-retest reliability

Preferable levels and acceptable levels of test retest reliability were found in most subscales, with the second completion of the scale taking place seven to 14 days after the first completion. Reported Cronbach's alphas were 0.83, 0.73, 0.80, 0.84 and 0.67 for Alienation, Stereotype Endorsement, Discrimination Experience, Social Withdrawal and Stigma Resistance, respectively. The details of reliability of the scale are provided in Table 1. In addition, Table 2 shows the details of correlated item-to-total correlation and Cronbach's coefficient alpha if the item is deleted from the TIS-LCH. The correlated item-to-total correlation is used to indicate

the degree to which an item correlates with the total score. A score lower than 0.3 indicates that the item is measuring something different from the scale as a whole (Pallant, 2016). For TIS-LCH subscales, alpha values of 0.59 and 0.62 for Stereotype Endorsement and Discrimination Experience (respectively) were quite low.

In each subscale, the value of the correlated item to the total correlation of the two items in the Stereotype Endorsement subscale scored lower on the correlated item-to-total correlations: item *18: People can tell that I live in a care home by the way I look (0.24)* and *19: Because I live in a care home, I need others to make most decisions for me (0.17).* Removing item 19 from the subscale increased the value of alpha in the overall subscale to 0.60, although this is still considered to indicate low internal consistency.

As shown in Table 2, the value of the correlated item to the total correlation of one item of the Discrimination subscale item 3: *People discriminate against me because I live in a care home* demonstrated a low score (0.24) on the correlated item-to-total correlation. Removing this item from the subscale increased the value of the overall subscale to 0.66, which increased the value of Cronbach's coefficient alpha to reach a nearly acceptable level of internal consistency.

(Insert table 1 about here)

(Insert table 2 about here)

Discussion

The Thai version of Internalised Stigma of Mental Illness (TISMI) was adapted into the Thai version of Internalised Stigma of Living in a Care Home (TIS-LCH), for which psychometric properties were tested. The findings indicate that the TIS-LCH had good overall internal consistency, with an overall Cronbach's alpha of 0.87. This level of reliability is comparable

with the original TISMI (0.88) which was tested amongst 390 psychiatric clinic patients in Thailand (Wong-Anuchit et al., 2016).

The result of test-retest reliability coefficient of TIS-LCH was excellent for the full scale (ICC=.90). In addition, the subscales demonstrated acceptable to good test-retest reliability for Alienation (ICC=0.83), Stereotype Endorsement (ICC=0.73), Discrimination Experience (ICC=0.80), Social Withdrawal (ICC=0.84) and Stigma Resistance (ICC=0.67), comparable with the TISMI, which was found to be good to excellent for all subscales. The total score testing with 20 sample participants yielded the following results: total TISMI (ICC=.81), Alienation (ICC=0.93), Stereotype Endorsement (ICC=0.79), Discrimination Experience (ICC=0.79), Social Withdrawal (ICC=0.89) and Stigma Resistance (ICC=0.85) (Wong-Anuchit et al., 2016).

Overall, TIS-LCH demonstrated excellent internal consistency for the full scale and acceptable to good internal consistency for all five subscales. The stereotype endorsement subscale of Thai version of ISLCH had weaker Cronbach's alpha than the other four subscales, but it showed an acceptable level of ICC for test-retest reliability.

Limitations

This study was conducted in a single region of Thailand, which may limit the representativeness of the findings. Further reliability testing is recommended with samples in other areas of Thailand or Thai older people in countries with similar cultural contexts.

Validity for those subscales with low internal consistency reliability (Stereotype Endorsement and Discrimination Experience) should be investigated further in order to determine the contribution of individual items within each subscale theme.

Conclusion

The TIS-LCH is a valid and reliable tool for measuring internalised stigma of living in a care home amongst older Thai adults.

Clinical Implications:

- The Thai version of the IS-LCH (TIS-LCH) has adequate internal consistency reliability and good test-retest reliability.
- The IS-LCH is a useful research tool for assessing internalised stigma in older Thai care home residents.

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Appendix: The Thai Version of Internalised Stigma of Living in a Care Home (IS-LCH) Scale

แบบวัดการรับรู้ตราบาปภายในใจตนเองของการพักอาศัยอยู่ในสถานสงเคราะห์คนชรา

คำชี้แจง: โปรดทำเครื่องหมายวงกลมล้อมรอบตัวเลขที่ตรงกับความรู้สึกของคุณมากที่สุดในแต่ละข้อคำถาม ตามระดับความคิดเห็นดังต่อไปนี้ ไม่เห็นด้วยอย่างยิ่ง (1) ไม่เห็นด้วย (2) เห็นด้วย (3) หรือ เห็นด้วยอย่างยิ่ง (4)

คำถาม	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
ฉันรู้สึกโดดเดี่ยวราวกับว่าไม่มีที่สำหรับฉันในโลกใบนี้ เพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ผู้สูงอายุที่พักอาศัยอยู่ในสถานสงเคราะห์คนชรามักเป็นคนที่ถูกทอดทิ้ง	1	2	3	4
ผู้คนเลือกปฏิบัติต่อฉันเพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ฉันหลีกเลี่ยงที่จะใกล้ชิดคนอื่นๆ ที่เขาไม่ได้พักอาศัยอยู่ในสถานสงเคราะห์คนชราเพื่อหลีกเลี่ยงการถูกปฏิเสธ	1	2	3	4
ฉันรู้สึกอับอายที่ฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ผู้สูงอายุที่พักอาศัยอยู่ในสถานสงเคราะห์คนชราก็สามารถมีส่วนร่วมที่สำคัญในการทำประโยชน์ให้กับสังคมได้	1	2	3	4
ฉันรู้สึกต่ำต้อยกว่าคนอื่นที่เขาไม่ได้พักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ฉันไม่เข้าสังคมมากเหมือนอย่างเคย เพราะว่าการพักอาศัยอยู่ในสถานสงเคราะห์คนชรา อาจทำให้บุคคลอื่นคิดว่าฉันเป็นคนที่น่าสงสาร	1	2	3	4
ผู้สูงอายุที่พักอาศัยอยู่ในสถานสงเคราะห์คนชรา ไม่สามารถดำเนินชีวิตไปในทางที่ดีและมีคุณค่าได้	1	2	3	4
ฉันไม่พูดถึงเรื่องของตนเองให้คนอื่นฟังมากนัก เพราะฉันไม่อยากเป็นภาระให้กับบุคคลอื่น จากการที่ฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
การที่ผู้สูงอายุพักอาศัยอยู่ในสถานสงเคราะห์คนชราถูกมองอย่างมีอคติ (ถูกมองแบบเหมารวม) ทำให้ฉันต้องแยกตัวออกจากสังคมของคนปกติทั่วไป	1	2	3	4

คำถาม	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
การอยู่ร่วมกันกับคนที่ไม่ได้พักอาศัยอยู่ในสถานสงเคราะห์คนชรา ทำให้ฉันรู้สึกแปลกแยกหรือไม่เท่าเทียม	1	2	3	4
ฉันรู้สึกเป็นปกติธรรมดา เมื่อผู้คนเห็นฉันอยู่ในที่สาธารณะร่วมกับคนที่เห็นได้อย่างชัดเจนว่าเป็นผู้สูงอายุที่พักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ผู้คนมักปฏิบัติต่อฉันอย่างผู้ที่ด้อยกว่าหรือราวกับว่าฉันเป็นเด็กเพียงเพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ฉันรู้สึกน้อยเนื้อต่ำใจในตนเองที่ฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
การพักอาศัยอยู่ในสถานสงเคราะห์คนชราเป็นสิ่งที่ทำให้ฉันรู้สึกด้อยค่าในตนเอง	1	2	3	4
ผู้คนสามารถบอกได้ว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชราจากการมองลักษณะภายนอกของฉัน	1	2	3	4
เนื่องจากฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา ฉันจึงจำเป็นต้องให้บุคคลอื่นเป็นผู้ตัดสินใจแทนฉันเป็นส่วนใหญ่	1	2	3	4
คนที่ไม่เคยพักอาศัยอยู่ในสถานสงเคราะห์คนชราไม่สามารถเข้าใจในตัวฉันได้	1	2	3	4
ผู้คนเพิกเฉยต่อฉันหรือให้ความสำคัญกับฉันน้อยมาก เพียงเพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ฉันไม่สามารถทำประโยชน์ใดๆ ให้กับสังคมได้เลย เนื่องจากฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
การพักอาศัยอยู่ในสถานสงเคราะห์คนชราทำให้ฉันเป็นบุคคลผู้ซึ่งมีชีวิตที่แข็งแกร่ง	1	2	3	4
โดยทั่วไปแล้วฉันสามารถที่จะดำเนินชีวิตของฉันไปในวิถีทางที่ฉันต้องการได้	1	2	3	4
ฉันสามารถมีชีวิตที่ดีพร้อมและพึงพอใจในชีวิตของตนเองได้ ถึงแม้ว่าฉันจะพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4

คำถาม	ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
คนอื่นๆคิดว่าฉันไม่สามารถประสบความสำเร็จในชีวิตได้ เพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4
ฉันถูกมองอย่างมีอคติ (ถูกมองแบบเหมารวม) เพราะว่าฉันพักอาศัยอยู่ในสถานสงเคราะห์คนชรา	1	2	3	4